

A Wound Inflicted by a Friend does not Heal: Structure Equation Modelling (SEM) of Child Maltreatment, its Dimensions and their Demographic Parameters.

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Abstract

Purpose: Socio-demographic factors such as gender, age, residence, parental marital status, parental education level, family monthly income and number of children in family under 18 play an important role in people's day to day lives and especially in the maltreatment of children. The present study identifies these seven socio-demographic factors, which are hypothesized to influence maltreatment of children through three dimensions (1) What kind of abuse did you suffer from as a child? (2) Who abused you? (3) Who abused you more?

Methods: Exploratory Factor Analysis and Confirmatory Factor Analysis along with path diagrams are used to extract children's maltreatment from the factors and Structural Equation Modeling is run to verify the above factor structure and evaluate the influence of predictors on child maltreatment.

Findings: The corresponding beta (β) coefficient in the regression equation shows that education and gender are statistically the predictors of child maltreatment at 5% level of significance and affect it through two dimensions (except Who abused you more?).

Conclusion: Women are more likely to treat their children badly. People with better education are found to enact maltreatment of children. Other socio-demographic factors are not statistically significant in terms of impacting child maltreatment.

Keywords: child maltreatment, child abuse, education, gender, demographic factors, Egypt, Assiut.

I. INTRODUCTION

Child maltreatment is any form of physical, mental and emotional maltreatment of a child younger than 18. This has become a grave social issue that can have long term repercussions on the

victim's life such as lifelong physical or psychological problems. While

children can be vulnerable outside their homes it is equally a matter of concern that they can be subjected to maltreatment at the hands of their own family members. There can be multiple causes of child maltreatment and to date it remains a complex matter. While all parents want to love and protect their children, factors like extreme stress, turmoil, parental marital conflict, alcoholism etc. can become reasons for child maltreatment as they can make the work of caring of children overwhelming. According to WHO's fact sheets, one woman in every 5 and one man in every 13 has been subjected to sexual maltreatment during their childhood. Moreover, 25 percent of adults claim to have experienced some form of maltreatment during their childhood [1]. The kind of child maltreatment and the degree of its impact on a child's psychology is driven by several factors like the child's age and gender, the number of children in the family, parental marital status and education, and family income and place of residence. In this paper, these seven factors are explored to understand the kind of maltreatment that a child may experience and from whom.

Child maltreatment can happen in any place associated with a child: its home, school or community. Non-government and statutory child welfare organizations play an important role in the care and protection of children. It is their responsibility to duly respond to concerns about children, assure their safety, protect their rights, and provide care for the maltreatment children are subject to away from home. The rate of child maltreatment has grown significantly world-wide and this is a matter of grave concern. It has imposed great strains on child welfare agencies and has raised urgent questions on how to deal with the problem using permanent solutions. The alarming growth of child maltreatment reports has pressurized those agencies to such an extent that systems have had to be modified so that most of their resources are being used to investigate the root cause of the maltreatment.

This has resulted in scarcity of resources being available for use by children and families at risk of potential child maltreatment. Gilbert (p.3) found that administrators of public social service state that “child protection is child welfare” [2]. Child and family services have been trying to solve family problems while large and small child welfare agencies are promoting newer strategies and technologies to cope with the problem. It is believed that some important changes are required so “funding ... [can] be more flexible and available for services”, such as “fuller implementation of community-based Alternative Response Systems, subsidized kinship care, subsidized guardianship, and the advancement of post-permanent services” (Pecora et al. 2009, p.1)[3]. Reports of child maltreatment reach the agencies as a last resort only after preventive measures taken by educational programs have failed, when public housing and creation of job opportunities have not ensured safe housing, and when a mother’s health does not allow her to take care of her children. Children need a safe and nurturing environment and when this becomes scarce they feel deprived and unloved. This can also have psychological impact on children resulting from child maltreatment.

A. Purpose

This paper’s purpose is to show that child maltreatment is a construct of the following behavioral variables:

- *What kind of abuse did you suffer from as a child?* – shortened to *Kind of abuse* *Kind abuse*
- *Who abused you?* – shortened to *Who abused you*
Who
- *Who abused you more?* – shortened to *Who abused you more* *Who more*

This research also investigates how the following socio-demographic covariates affect the incidence of child maltreatment: gender of child (*gender*), age of child (*age*), residence of family (*residence*), marital status of parents (*marital*), educational level of parents (*education*), monthly family income (*income*), and number of children in family under 18 (*children*).

B. Literature Review

Having a history of childhood maltreatment is often reflected in the physical and emotional patterns of people in their adult years. Jones et al. (2010) [4] have studied the link between child maltreatment and the witnessing of violence and the high risk of HIV in both boys and girls. While different forms of child maltreatment were considered in this study, these researchers found that there is a positive relation between a child’s traumatic experience and high risk of HIV. The results also revealed that physical and emotional maltreatment

were more significant contributing factors to HIV than child sexual maltreatment. However, they also concluded that this relation between child maltreatment and HIV risk is not moderated by gender. The severity of impact derived from child maltreatment often comes from the fact that victims are reluctant to disclose their experience to any one in their family for reasons of fear of alienation, or ridicule, or lack of trust. In this context, Ullman and Filipas (2005) [5] have studied gender differentiations regarding disclosure and post-maltreatment coping. They observed that severity of child sexual maltreatment is greater in the case of girls than boys, and in dealing with the after effects of maltreatment, women suffer more than men. When it comes to disclosing their experience, though, it has been seen that women are more likely to disclose than men and also that women receive more positive responses to disclosure than men. Moreover, while women tend to suffer from PTSD if they delay disclosure, men’s symptoms are not subjected to the timing of their disclosure.

The long-term effects of physical maltreatment of children has been studied by Lansford et al. (2012)[6] who concluded that the effects are less likely to be short run. The general assumption from their study was that the effects of the experience of physical maltreatment in the first five years of childhood can last for as long as 12 years, as reflected in externalizing to internalizing outcomes, and furthermore, that the long-term effects of physical maltreatment can be more severe in the case of girls than boys. Studies have also shown that types of child maltreatment may vary in high income and low-income countries. Gilbert et al. (2008) [7] have observed that girls are more subjected to sexual maltreatment than boys in high income countries, but other types of maltreatment are similar for both genders. On the other hand, incidences of infanticides, sexual maltreatment and neglect are more common with girls than boys in low income countries, and boys are more subjected to harsh physical treatment than girls.

Child maltreatment can manifest in many behaviors, physical, emotional and sexual. Its long-term impact can be seen in adults who experienced maltreatment during their childhood (Mullen et al., 1996) [8]. Such impacts can be differentiated based on the form of the childhood maltreatment. For instance, adults who experienced more sexual maltreatment than physical maltreatment during childhood are likely to suffer from sexual problems; and adults with a history of emotional maltreatment exhibit sexual difficulties. However, the impact of emotional maltreatment is further differentiated by the gender of the offender. While children who suffer at the hands of female tormentors are likely to suffer from psychological problems in their adult life,

children who are emotionally maltreated by males are more likely to suffer from sexual problems. Mullen et al. (1996) [8] have further ascertained that while child maltreatment is more common in low income and socially deprived families, risks are lower if children are close to their mothers as mothers can provide them protection.

The different impacts of various kinds of child maltreatment like physical or sexual maltreatment, and neglect have been studied by Trickett and Mc-Bride-Chang (1995) [9]. It was found that any kind of child maltreatment has severe negative impact on the development and adjustment of children and that this can continue till adulthood. Children with experiences of sexual maltreatment or neglect are inclined to remain socially aloof, while children with experiences of physical maltreatment are inclined to display signs of aggression which can disturb normal relationships with peers, and which can even end in rejection by peers. In the case of sexually maltreated children, the effects can be different in the immediate aftermath and in the long term. The long-term effects of depression, social isolation, tendency to self-harm, sexual maladjustments etc. can manifest during later adulthood, even though the effects are absent during college years (Browne & Finkelhor, 1986) [10]. Coffey et al. (1996) [11] have observed that adult women who experienced sexual maltreatment during childhood tend to develop symptoms of self-blame, powerlessness, lesser inclination to trust others, and feelings of stigmatization. Moreover, it is seen that the degree of self-blame tends to be affected by the level of sexual maltreatment experienced, and it has also been confirmed that women who suffered from sexual maltreatment for prolonged periods during childhood tend to exhibit more self-blame than those who experienced the trauma for shorter periods, apparently because the former tend to believe that they could have resisted the maltreatment.

There can also be cases where any of the usual effects of child sexual maltreatment remain absent in many sexually maltreated children. Conte & Schuerman (1987) [12] have studied 369 sexually maltreated children to conclude that 21 percent of them do not display the normal effects of social isolation and anxiety. Consequently, the authors have suggested that it is not correct to assess a child's maltreatment based on its external behavior. It can also happen that children may show signs of the behaviors associated with sexual maltreatment for entirely different reasons like mental stress occurring from divorce proceedings between parents.

C. Child's gender association

Contradictory to the common belief that female children are more exposed to child maltreatment, research has proved otherwise. Faller (1989) [13] has pointed out that most of the times

male children's experience remains undisclosed for the fact that compared to their female counterparts who suffer in the hands of family members, male children are more likely to be maltreated by people outside their family. Another reason for unreported male child maltreatment is the fact that boys are less inclined to complain of maltreatment than girls as they are more reluctant than girls to reveal weaknesses or vulnerabilities. Boys also fear that they will be labelled as homosexual. In this context, research conducted by Wellman (1993) [14] on 824 college students of both gender revealed that women have stronger beliefs about, and reactions toward, victims and offenders than men. Even though, six percent of males claimed they were sexually maltreated during childhood as opposed to 13 percent of females, it is interesting to note that both genders were approached by potential offenders in equal proportion, with girls succumbing more easily due to their compliant nature. On the other hand, though, boys were more likely to be perpetrators since they are inclined to be more aggressive and dominant than girls. However, in the case of physical maltreatment the result is contradictory, according to (Sobsey et al., 1997) [15], as men report more cases of physical maltreatment during childhood than women. The study has also revealed that while girls are more likely to be sexually maltreated, boys more commonly experience other offences like negligence and physical maltreatment than girls. These statistics are also supported by Ross (1996). [16]

Considering the fact that sexual maltreatment is a natural reason for suspicion and mistrust within child victims, it is natural to conclude that the effect will be equal for both boys and girls. Spataro et al. (2004) [17] have explored this and found that mental disorders in children who have suffered from sexual maltreatment are more common in boys than girls. Their study has revealed that although boys display more behavioral problems than girls, girls display more conduct disorders than boys, and that personality disorders are equally evident in both genders.

D. Parental views of upbringing

While the issue of child maltreatment is itself a complex issue, it nevertheless can be viewed in a broader social context as well. Since parents are responsible for the upbringing of children, Garbarino (1976) [18] has studied the impact of socioeconomic stress on mothers. In rural areas, where most mothers are less educated and also single parents, the rate of child maltreatment can be high, which is often a reflection of the mother's frustration level since these mothers find it difficult to cope with child rearing with limited resources. In other studies it has been revealed that abusive mothers establish less supportive relationships with their children (Burgess & Conger, 1978), [19] more aggressiveness during

verbal or nonverbal interactions with their children (Bousha&Twentyman, 1984), [20] and are less active with their children than non-abusive mothers (Schindler &Arkowitz, 1986) [21]. Although incidences of child maltreatment and neglect are common in families of any economic status, it is however seen that low parental income is a major influencing factor and that children from poor families are more likely to experience neglect and severe violence than children from high income families (English, 1998). [22] Another factor that increases the risk of child maltreatment concerns the parental relationship. Ross (1996) [16] has determined that violence between parents can increase the probability of child maltreatment at the hands of the aggressive parent, and in addition, that with increasing marital violence, male parents show more inclination toward child maltreatment than female parents.

DiLillo & Damashek (2003) [23] have noted that parents with a background of childhood sexual maltreatment may have difficulty in establishing a normal relationship with their children. Additionally, such parents tend to insist on stringent boundaries regarding their children's behavior and tend to use harsh punishment if their children broach those boundaries. It was also noted that the children of parents possessing a history of childhood sexual maltreatment themselves are more likely to experience maltreatment than children of parents without such a history (Oates et al., 1998).[24] However, it was not clear whether the maltreatment these second-generation children face is from family or non-family members. It has been established too that parents with a history of childhood maltreatment react more strongly when their children have similar experiences compared with parents who have no such history (Deblinger et al., 1994) [25]. The tendency to inflict maltreatment on children is said to be more common among mothers who have been maltreated in their childhood by their own mothers. Results from a study conducted with 81 physically abusive mothers have shown that more than half of them were physically maltreated during their childhood by their fathers (Coohey& Braun, 1997) [26]. The results also concluded that women who have suffered during childhood at the hands of their own mother have the highest probability of physically maltreating their own children in turn. The assumption here is that this is a behavioral pattern adopted from their mothers. The fact that maltreated mothers are more inclined

E. Predictive factors

Although it is commonly assumed that the lack of a parent-children bond, or a history of childhood maltreatment by parents are contributing factors to child maltreatment, it is nevertheless true that these factors are also found in families without child maltreatment. To determine the differentiating

toward becoming abusive than their non-maltreated counterparts has also been substantiated by Pears and Capaldi (2001), [27] who furthermore argue that maltreated parents in possession of discipline skills are

less abusive than maltreated parents lacking discipline skills, because the latter suffer from irritation and frustration when interacting with their children and lack other options.

F. Evolvement of child welfare agencies

A child can develop well only when it gets proper education and health care. Children's well-being can be assured only when society has the ability to protect its children's rights and safeguard them from injury and maltreatment (Jack & Gill, 2010). [28] Child welfare agencies are formed for protection of children and their all-round development, and as a result, develop child protection policies designed for the permanent well-being of children. Their policies are based on interviews with children and families who have been reported for child maltreatment or neglect. The efficiency of child welfare decisions and case plans depends on the agency's ability to conduct a proper investigation of the child's mistreatment so it can draw precise and accurate conclusions derived from the information collected. Agency workers who are responsible for interviewing children must have the knowledge and skills so they can make emotional inquiries sensitively. Agencies should be able to train their workers effectively, so they have the capacity to impart necessary values and knowledge in order to fulfil their child safety missions (Pence, 2011). [29] Over the past three decades there has been an alteration in the philosophy and strategies used to determine whether intervention is necessary when a child is actually, or is potentially at risk of, being harmed or injured. Traditionally, child maltreatment investigations involved participation of criminal and juvenile laws, but this has evolved, so that nowadays there is more "understanding of risk and safety, political pressures, implementation of evidence-based and research-supported interventions, philosophical shifts, and other variables". Traditionally, the agency workers used to act based on complaints of maltreatment; now they take the necessary steps to collect accurate information about the truth and extent of maltreatment, and then decide what case plans should be instituted to ensure children's safety and promote protective behaviors in the caretakers (Pence, 2011) [29].

factors between families with, and without child maltreatment, Oates et al. (1980) [30] have compared 56 families with child maltreatment with a control group of families without child maltreatment. It was found that several factors contribute to child maltreatment by parents: unplanned pregnancies resulting in lack of parent training; high parental expectations of children about which parents can

become abusive, if their children misbehave more often than children from other families. There can be other reasons too for which parents may release their frustration on their children: financial difficulties in the family, or parental concern about their own health issues,

II. GEOGRAPHICAL DISTRIBUTION OF CHILD MALTREATMENT

It seems that there is a geographical component to child maltreatment in that the degree and rates of abuse vary depending on where the child is located geographically. UNICEF's 2015 [] study surveyed the violence perpetuated on children in three Governorates of Egypt, Cairo, Assiut and Alexandria. The study covered different categories of violence: from the lowest level of violence of being pushed, shaken, pulled, grabbed or pinched, to the next level of being kicked or hit, to a third level of being beaten with a stick, belt, wooden cane or whip, through to the most extreme level of violence involving implements designed to cut, burn, scald, suffocate, tie up [pp. 11-15]. The study surveyed which locations, in the home, on the street or at school, where the different degrees of violence occurred in these three Governorates. The survey also distinguished the timing of the incidents of violence by using three categories: incidents from the past week, incidents from the three weeks prior to that (i.e.

III. METHOD

The research has undertaken a positivist approach through a survey based on a sample of 1751 children 10-16 years of age across 27 Governorates of Assiut, Egypt, during the period May 2014 to December 2015. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) along with path diagrams were used to extract children's maltreatment from the three factors: *Kind of abuse*, *Who abused you*, and *Who abused you most*. Structural Equation Modeling (SEM) was then run to verify that factor structure and to evaluate the influence of predictors (i.e. the socio-demographic variables) on maltreatment of children.

IV. QUESTIONNAIRE

A twenty-three-item questionnaire was distributed to all children (including males and females) in a randomly selected sample and was answered during face-to-face interactions. Both open-ended and close-ended questions were used. Most of

month less the last week) and incidents from the last eleven months (i.e. year less the past month).

The UNICEF survey found that the percentages of surveyed children experiencing violent incidents varied for each of the geographical locations, for each of the categories of violence, for each of the locations where the incidents occurred and for each of the time periods. So, for instance, of the surveyed children, 11 per cent in Cairo, 15 per cent in Alexandria and 21 per cent in Assiut had experienced all of the first three categories of violence. Children experienced more violence at home in Cairo and Assiut than they did at school, but it was more equal in Alexandria. The children of Assiut experienced the greatest percentages of the lowest and second categories of violence, and the children of Alexandria experienced the greatest percentages of the third and fourth categories of violence. The perpetrators of the second category of violence tended to be other children in Alexandria, but parents and relatives in Assiut. Alexandria was alone in that its 13-15 year old children were more likely to be subject to the second category of violence than 16-17 year old children. In addition, more girls than boys in Alexandria and Assiut (but not Cairo) claimed that they had not been hit by an object (p. 14).

the items were structured as per the Likert scale of 1 to 5. SPSS software was used for the statistical analysis. Confirmatory Factor Analysis with path diagram models was used, to estimate the goodness of fit tests for the Structural Equation Modelling (SEM).

A. Instrument: Reliability, Validity and Factor Extraction

The reliability of the questionnaire was measured with the KMO (Kaiser-Meyer-Olkin) Bartlett's test. Maltreatment of children was tested as a construct of the following observed behavioral dimensions (i.e. the socio-demographic variables): (*age*, *gender*, *place of residence*, *parental marital status*, *parental educational level*, *monthly family income*, and *number of children less than 18 years*).. The dimension of *Child Maltreatment Background* was assumed to load onto the following variables, so these were initially explored in EFA by the use of SPSS: *Kind of abuse*, *Who abused you*, and *Who abused you most*.

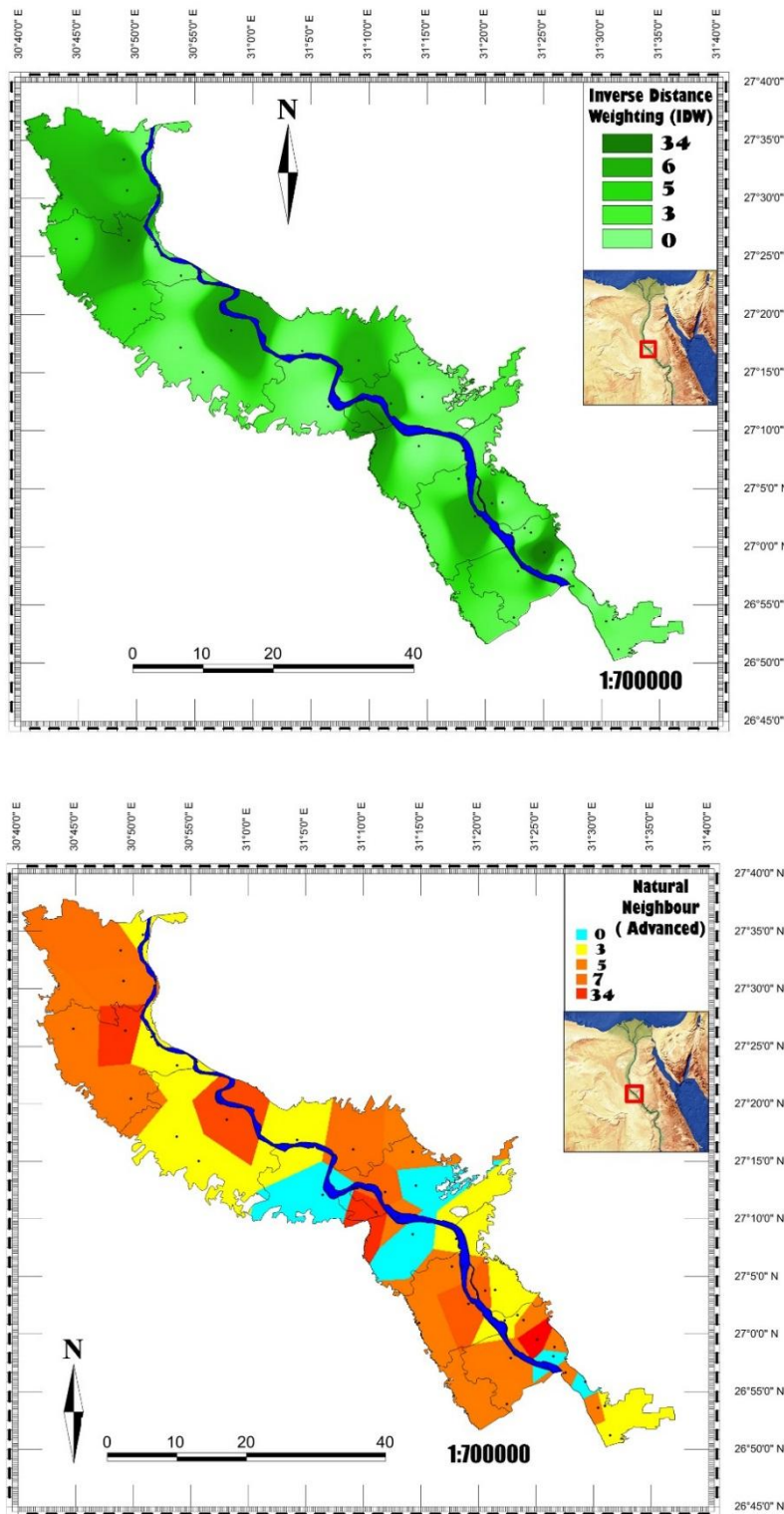


Figure 1. The Heat Map Of Comparisons Between Inverse Distance Weighting (Idw) And Natural Neighbour (Nn) Interpolation Methods Of Child Maltreatment By Brothers In The Floodplain Of Assiut Governorate, Egypt.

First, the suitability of a factor analysis was tested via KMO Bartlett's test. The closer the value of KMO tests to 1, the better. The obtained result of 0.522 showed moderate suitability. The sphericity

assumption held since Bartlett's test is significant at the 5% level, so by this means, therefore, it was established that the factor analysis could continue. It is evident that *Who abused* and *Who abused more*

have high shared variance, and the third variable has only a low level of shared variance. However, a further look at the extracted factors shows that there is one extracted factor is associated with the variables included in the dimension. The criterion for extraction is Eigenvalue higher than 1, so at 53.22%, this factor, *Child Maltreatment Background* explains more than 50% of the variance, and all factors, except *Kind of abuse*, are loaded highly as single extracted factors.

After that successful exploratory analysis, further confirmatory factor analysis was carried out. However, the following covariates (i.e. the socio-demographic variables) relating to the child's environment were added to the model since it was assumed that they affect the latent variable, i.e. the background of maltreatment in children: age, gender, place of residence, parental marital status, parental educational level, monthly family income and number of children under 18.

B. Predictive factors

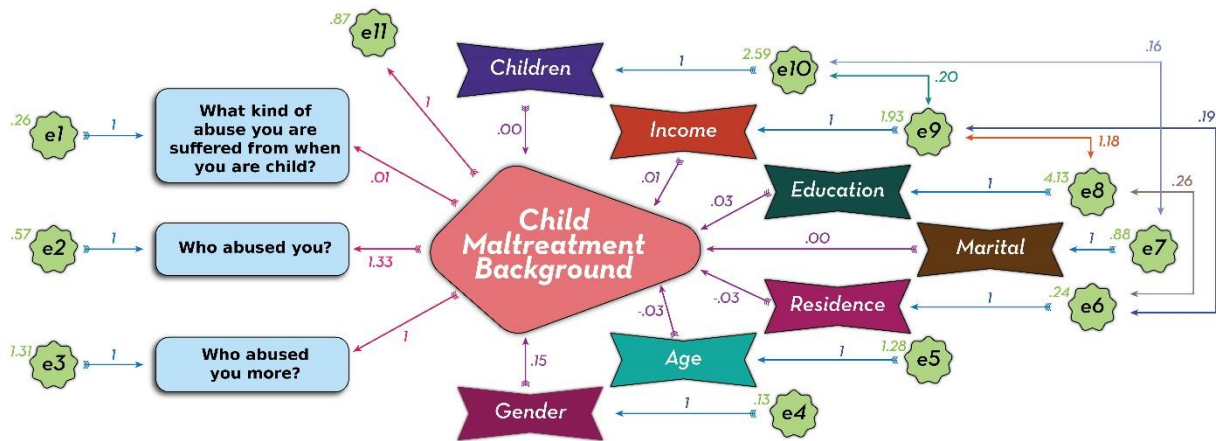
To isolate the predictive factors, it was important to begin with by testing for a single predictor (i.e. independent variable), which could

statistically and significantly influence the dependent variable *Child Maltreatment Background*. This involved two steps. First, the dependent variable was extracted and evaluated according to its three determinant variables using EFA, which showed that the three behavioral variables which construct *Child Maltreatment Background* are in fact: *Kind of abuse*, *Who abused you*, and *Who abused you most*. Secondly, a SEM analysis was carried out for the dependent variable (*Child Maltreatment Background*), which illustrated its association with the various independent socio-demographic variables (*age, gender, place of residence, parental marital status, parental educational level, monthly family income, and number of children less than 18 years*).

C. Findings

Child Maltreatment Background is an unobserved factor, but, at the same time, it is a significant driver (at the 5% level) for the observed variables *Kind of abuse*, *Who abused you* and *Who abused you more*. However, in turn, Child Maltreatment Background is significantly affected (at the 5% level) by some of the socio-demographic variables, including *gender, age and educational level*. Some of those factors significantly correlate with each other as well.

Figure 2. Path Diagram For The Three Dimensions Of Child Maltreatment And Their Relation To The Socio-Demographic Variables.



The significant estimated effects between the unobserved Child Maltreatment Background and the various factors can be interpreted in the following way. Higher levels of Child Maltreatment significantly resulted in higher chances that abusers were friends (mostly), relatives (secondly) and teachers (thirdly), rather than close family members: father, mother and brothers (least frequent abusers). Females had a worse Child Maltreatment Background.

The older the person, the less child maltreatment was likely to be experienced. The higher the person's education level, the worse the child's maltreatment background was.

Table 1 below provides information on the goodness of fit of the proposed model. That can be seen by comparing the proposed model (referred to as the Default model) with the Independent and Saturated models.

Table 1. Model Fit Values As Revealed By The Sem

Model	CMIN	DF	CMIN/DF	IFI	GFI	TLI	CFI	RMSEA	PCLOSE
Default	446.142	29	13.585	0.740	0.950	0.592	0.606	0.091	0.000
Saturated	0.000	0		1.000	1.000		1.000		
Independent	1631.492	45	21.585	0.000	0.848	0.000	0.000	0.142	0.000

All the variances in the model are significant at the 5% level and the variance of the construct Child Maltreatment is significant at the 10% level. To consider the goodness of fit measures start with the Chi-square measured by CMIN in Table 1. For the model to be acceptable, the CMIN should not be significant. However, in this case it is significant at the 5% level, so a further look at the goodness of fit indices is required. The RMSEA is 0.085 which is on the threshold for an acceptable model. The CFI is

0.606 which is approaching 1, and indicates an acceptable fit. This is confirmed by the IFI, GFI and NFI. All the goodness of fit values (AIC) measures are meaningful for comparing models. In conclusion, given the data and complexity of the model along with the limit in variables which load properly in the construct, the model can be considered to be acceptable.

Table 2: Regression Weights For Each Indicator And Dimension Of Child Maltreatment For Improved Model.

			Estimate	S.E.	C.R.	P	Label
Child Maltreatment Background	←	gender	0.194	0.097	1.996	0.046	
Child Maltreatment Background	←	age	-0.063	0.031	-2.008	0.045	
Child Maltreatment Background	←	residence	0.107	0.075	1.422	0.155	
Child Maltreatment Background	←	marital	0.029	0.038	0.758	0.449	
Child Maltreatment Background	←	education	0.040	0.019	2.069	0.039	
Child Maltreatment Background	←	income	-0.040	0.029	-1.391	0.164	
Child Maltreatment Background	←	children	0.005	0.022	0.221	0.825	
kind_abuse	←	Child Maltreatment Background	0.040	0.017	2.323	0.020	
who	←	Child Maltreatment Background	0.569	0.210	2.712	0.007	
who_more	←	Child Maltreatment Background	1.000				

From the results in Table 2, it can be inferred that gender, age and education significantly affect Child Maltreatment at a 5% level of significance. This is because the corresponding p-values of these three predictors are less than 0.05. Gender is directly related to child maltreatment, with a coefficient of 0.194 and a p-value of 0.046. This means that females have a worse maltreatment background, perhaps because it is usually mothers who are at home dealing with the children most of the time, and are therefore more likely to lose their patience with children's tantrums and recalcitrant behavior. Age is inversely related to child maltreatment, with a coefficient of -0.063 and p-value of 0.045. As a child grows older, he or she is less subject to maltreatment, because with age a child gains sensitivity to impending dangers and the strength to defend against maltreatment. With a

higher level of education level, a child is less likely to be subject to maltreatment, this being reflected in a p-value of 0.039 and a positive coefficient. With higher levels of education, a child gains sufficient maturity to defend against maltreatments or at least protest on time. Child maltreatment is significantly reflected in the dimensions *Kind of abuse*, *Who abused you* and *Who abused you more*. These dimensions confirm that a child has been abused.

V. DISCUSSION

The current study has shown that compared to male children, female children suffer more child maltreatment. This has been confirmed by previous studies (Ullman & Filipas, 2005 [5]; Garnefski & Diekstra, 1997 [31]; Lamb & Garrelson, 2003 [32]), which observed that women report their

abuse to others more often than men, and that women report more intense maltreatment than men. This current study agrees with that, in that females report more intense and prolonged maltreatment than males during their childhood. In the context of gender, Gorey and Leslie (1997) [33] reported that in the USA, sexual abuse is reported by 12 - 17 percent of girls, while only five to eight percent of boys reported it. Lamb and Garrelson (2003) [32] have further observed that the extent of disclosure by either men or women is also influenced by the gender of the interviewer: women are more comfortable revealing their experience to female interviewers, while men showed differences in their response to male and female interviewers. When age is considered, as well, older girls are more inclined to provide greater details of their maltreatment than their younger ones.

While the current study confirms that female children are more likely to become victims of maltreatment, and contradictory to the common belief that female children are more exposed to child abuse, research has proved otherwise. It has been observed by Faller (1989) [13] that male children can become victims of maltreatment from perpetrators who are outside their family, whereas female children are mostly victims at the hands of their own family members. For this reason, female children are more likely to disclose their traumatic experiences than their male counterparts. Wellman (1993) [14] revealed that women have stronger beliefs about, and reactions, toward abuse victims and offenders than men. Even though, six percent of males claimed they were sexually abused during childhood as opposed to 13 percent of females, in the case of physical abuse the result is contradictory with men reporting more cases of physical abuse during childhood than women (Sobsey et al., 1997) [15].

The current study concluded that the degree of maltreatment is gender-based but not location-of-residence-based. Our finding that the degree of maltreatment is gender based is supported by previous research like that of Boggiano and Barrett (1991) [34], who have studied children's expectation levels regarding getting help based on their gender. Given that it was generally believed that girls exhibited a more helpless approach than boys, and boys greater resilience, different strategies were chosen for providing help to girls and boys. The authors found contradictory results, however, as some boys acted helplessly, and some girls acted with resilience, so the strategies had to be applied depending on whether a child presented as helpless or resilient, rather than whether it was male or female. That fact remained though, that girls tended to act helplessly, and boys tended to act with resilience. Thus, getting or not getting help is more gender specific: resilient children (usually boys) may end up getting no help.

Another important factor that influences intervention methods is the disclosure pattern of abused children. Based on the degree of disclosure and the time of disclosure it is possible to provide appropriate help to abused children, and thus reduce both the short and long term negative impacts of maltreatment, but these very disclosure patterns themselves tend to be gender based, and thus provide another support for our finding that maltreatment is gender based. According to Paine and Hansen (2002), [35] the ability or non-ability to disclose abuse can affect the investigation process. Children's lack of success in disclosing facts, and their actual denial of facts, can impede the investigation process and thereby prevent them from getting help. Many previous research studies have proved that disclosure is more common to female than male victims. According to Finkelhor et al's study conducted in 1990 [36], for instance, 42 percent of male victims and 33 percent of female victims failed to disclose facts. The fact that girls are more willing to disclose abuse than boys has also been supported by Lamb and Edgar-Smith (1994) [37] and Gries et al. (1996) [38]. Finkelhor et al [36] suggested one reason for this: that boys feared being thought of as homosexual and feared suffering consequent stigmatization. Goodman-Brown et al. [39] in 2003, however, made a contrary finding that gender has no influence on disclosure patterns of abused children, but this survey had very few male participants compared to female participants (16 male as opposed to 98 female abused children).

This current study failed to establish any relation between place of residence and maltreatment. However, Choo et al. [40] argued in 2010 that in rural areas, emergency departments in hospitals fail to provide proper help to abused children due to lack of resources compared to urban areas. Menard and Ruback [41], though, maintained in 2003 that disclosure is less common in rural areas whose populations live below the poverty line, or in areas with higher socio-economic status.

The current study has established an inverse relation between a child's age and maltreatment. Incidences of maltreatment reduce as the child grows older. Older children are more likely to complain to their peers or other older members of their family than their younger counterparts. Often children are afraid to complain since they feel that they will not be believed or they are threatened by the perpetrators. It may also happen that the perpetrator may be a close relative, so children often confuse physical maltreatment with normal behaviour, as that is how they are treated by those adult members. It so happens that in the case of younger children maltreatment may occur for a longer period, since they are more vulnerable and emotionally weaker than older

children. According to pediatricians, the impact of maltreatment can also vary in degree depending on the age of the child. For younger children the emotional damage can be more extreme than for older children (Healthychildren, 2017). This may be because older children may succumb to drugs or alcohol, run away from home or confide in other members of the family. The current study's result that younger children are more likely to experience maltreatment than the older children has also been supported by statistical data. In the year 2014, there have been reports that 14.8 children per thousand who are three years or younger have experienced child maltreatment, while 10.6 children per thousand who are between 4 and 7 years have experienced maltreatment. For even older children, the figures are 7.9 per thousand for children aged 8 to 11, 6.9 per thousand for children aged 12 to 15, and 4.6 per thousand for children aged 16 to 17 (Childtrends, 2016). More maltreatment can also result from neglect and younger children are more prone to get physically hurt when neglected, as older children are more capable of preventing physical harm caused by neglect. The result of the current study has confirmed the inverse relation between the age of the child and the impact of child maltreatment. This has also been supported by Gutman (2010): "children who are older at the age of onset of maltreatment and who are exposed to shorter, less severe, and pervasive experiences of abuse are more likely to experience resilience" (p. 335).

Education as a factor has also been studied in the current paper and it has been observed that children with higher education are less likely to become victims of child maltreatment than children with low or no education. This is because with education comes awareness about one's safety and also confidence to deal with negative circumstances. A child can develop well only when it receives a proper education and can access health care facilities. This has also been supported by previous researchers that the well-being of children can be assured only when the society can protect the rights of its children and safeguard them from injury and abuse (Jack & Gill, 2010, p. 82). Higher education instils a sense of well-being in an individual and hence children with higher education are less likely to be maltreated. Children who are victims of maltreatment can exhibit poor performance in their academic life in schools and colleges. Therefore, there is a two way relationship between education and child maltreatment. While low education or lack of education make a child more vulnerable for potential perpetrators, it is also true that those children who have been victims of maltreatment for a prolonged period show emotional problems that prohibit them from achieving good grades in schools. This has also been supported by prior researchers like Slade and Wissow (2007), who have proved that children who have been subjected to intense child maltreatment

have a greater probability of getting low average grades in schools, and also show symptoms of having difficulties in completing homework assignments. Children who are subjected to maltreatment usually develop psychological and behavioural problems and these can cause lower levels of competency leading to poor academic performance in schools. For instance, those children who are from families having interpersonal conflicts or those children who experience physical or sexual maltreatment can develop a fear of actual or potential threats. This may cause them to fear any kind of disciplinary measures in schools resulting in greater risks for suspensions from schools, or other forms of interruption to classroom learning as has been proved by Rapport et al. (2001).

Children are victims of different kinds of maltreatment due to their immaturity both physically and emotionally. There can be different kinds of child maltreatment like physical abuse, sexual abuse, emotional abuse and child neglect. Physical abuse is any kind of intentional bodily harm caused to a child by its parents or caretakers. Almost 28.3% of adults have reported experiencing physical abuse during their childhood. Sexual abuse occurs when an adult or an older and stronger child uses a younger child for a sexual purpose. Almost 20.7% of adults have reported experiencing sexual abuse during their childhood. Emotional abuse usually happens over a prolonged period when parents or caretakers harm a child's emotional and social development. Almost 10.6% of adults have reported experiencing emotional abuse during their childhood. When a child is neglected and therefore does not receive proper medical or health care and emotional support, then the child experiences intense neglect from his parents or caretakers (Childhelp, 2017).

Each type of abuse can be identified by a set of symptoms that can reflect in a child's physical or emotional being. The current study has supported this theory that any of these symptoms can confirm that the child has been experiencing maltreatment and hence proper medical care and attention needs to be given to the child concerned. There are several factors that determine the impact of sexual abuse on children. These factors can be the degree of force used during sexual abuse, the relationship between the abuser and the abused, the gender of both child and abuser, sexual orientation, and whether the child was in an emotional state that made him or her believe that the sexual act was nothing abnormal. The last factor can arise because a child is emotionally immature and vulnerable and so easy to make believe that sexual acts are not abusive actions. The current study's finding that each type of abuse can have different forms of impact on a child is also confirmed by Briere and Runtz (1990) who have associated childhood sexual maltreatment with problems in sexuality,

physical maltreatment with increased aggressive behavior, and psychological maltreatment with low self-esteem or low self-confidence. The fact that the impact of child maltreatment is also determined by who abused and who abused more has also been confirmed by the current study. A child can be abused either by close relatives including parents, siblings, grandparents or other extended family member, or else a child (especially male child) can be abuse outside the home by peers, teachers or even strangers. The impact of child maltreatment can vary in degree depending on who has abused or who has abused more. For instance, children from a low social or economic background can be subjected to maltreatment from their parents. However, while in some cases fathers can be more abusive there are also instances of mothers being more abusive. The long-term impact can depend on who has abused more. Coohy and Braun (1997) have proved that the highest possibility that female children who have suffered at the hands of their mothers will grow up to be abusive mothers themselves.

Strengths and limitations and future scope of research

This paper is about the common, traditional experience of child maltreatment in Egypt, the factors responsible for the maltreatment, and the representation of maltreatment through three dimensions. The results for Assiut should be generalizable for other countries even if they have different demographics because the demographic predictors of maltreatment of children that this paper reveals could be common for other countries as well. The paper could initiate research along the same lines for other nations, especially western ones. A comparative analysis could be done between western and non-western nations on the same ground. Research on various measures designed to deal with child maltreatment and their positive impact in tackling the consequences of maltreatment in children can be carried out further as well.

VI. CONCLUSION

This paper has explored the various facets of child maltreatment with relation to variables like age, gender and education. It has been found from the current study that older children are less severely affected by maltreatment and are less likely to become victims of maltreatment than their younger counterparts. In the context of gender, females have a worse background of maltreatment compared to boys. As for education it has been observed that children with higher education are less vulnerable than children with lower education. Moreover, the three dimensions like kind of abuse, who abused and who

abused more also can have differentiated impacts on a child as confirmed by the current study.

Today, the state of adults' lives often reflects the environment they lived in as children. Although it is difficult to ascertain the underlying reason, it so happens that the prolonged trauma of childhood maltreatment can prevent adults from leading normal lives leading to unpredictability due to mood swings, and inconsistency. Issues such as problems in workplaces arising from low concentration, failed relationships with peers and spouse, and even financial setbacks are often found to be long-term impacts of child maltreatment. Negative effects from child abuse and maltreatment means that a child is deprived of the normal and healthy environment required for proper child development. Maltreated children do not often develop resilience although studies have shown that they achieve a higher level of adaptation than others, which maybe a result of the different intensities and longevities of abuse.

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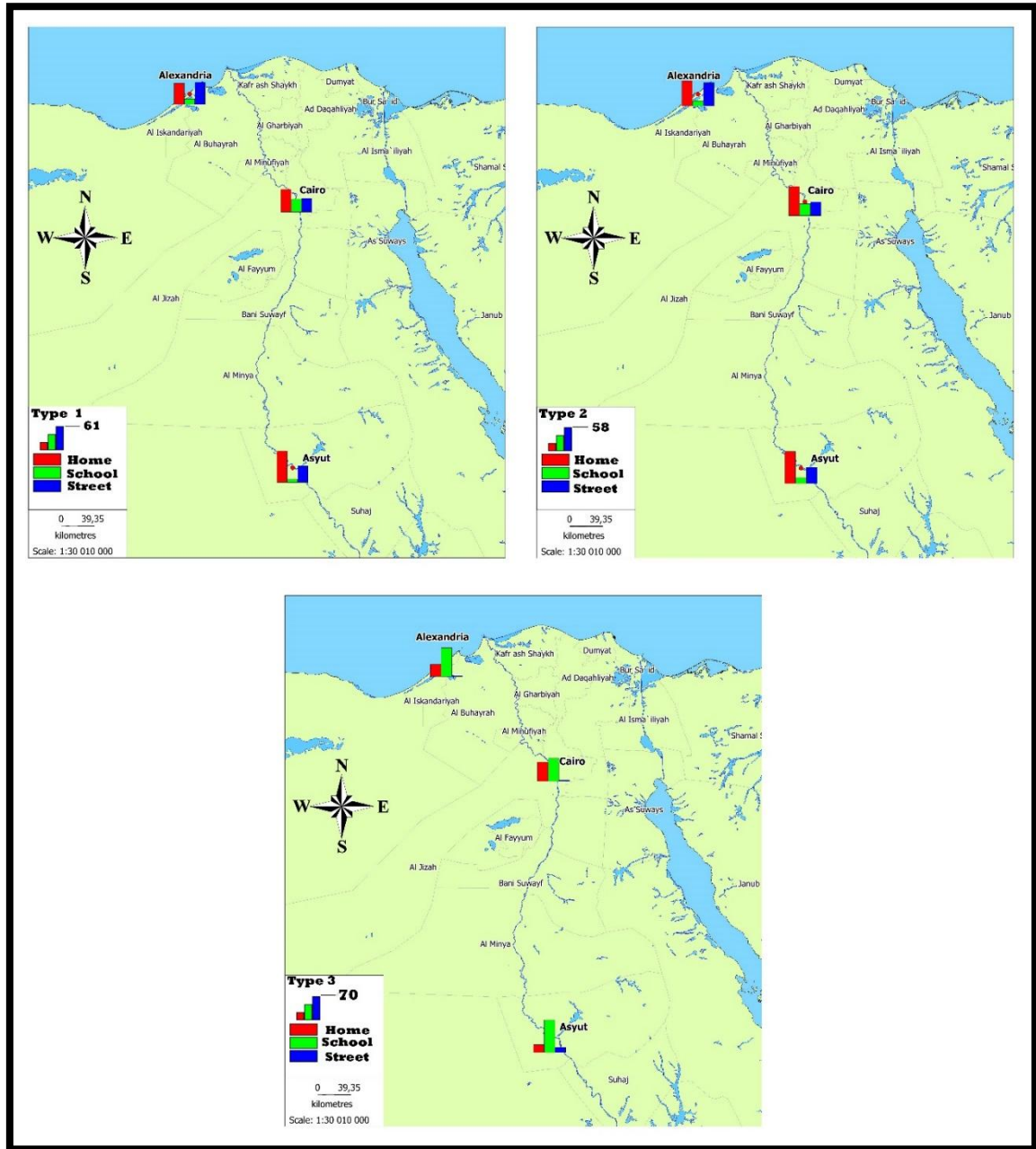
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APPENDICES

Figure 3. The geographical distributions of Physical Violence Types Takes Place in the Year Preceding the Survey At Cairo, Alexandria and Assiut Governorates.



Data Sources: National Council for Childhood and Motherhood (NCCM) and UNICEF. (2015). Violence against Children in Egypt. A Quantitative Survey and Qualitative Study in Cairo, Alexandria and Assiut, NCCM and UNICEF Egypt, Cairo, p11.

TABLE 3. WHERE PHYSICAL VIOLENCE TAKES PLACE (%) IN THE YEAR PRECEDING THE SURVEY

Type of violence	Governorate	Home	School	Street
Type 1: Being pushed, hair/ears pulled, being pinched, being grabbed by clothing, or shaken	Cairo	45	26	28
	Alexandria	41	11	44
	Assiut	61	5	33
Type 2: Being kicked or beaten	Cairo	53	22	25
	Alexandria	46	10	42
	Assiut	58	11	30
Type 3: Being beaten with a stick, belt, wooden cane or whip	Cairo	41	50	3
	Alexandria	27	62	3
	Assiut	17	70	11

For each geographical domain, the categories don't add-up to 100% because of the "Other" category

Data Sources: National Council for Childhood and Motherhood (NCCM) and UNICEF. (2015). *Violence against Children in Egypt. A Quantitative Survey and Qualitative Study in Cairo, Alexandria and Assiut*, NCCM and UNICEF Egypt, Cairo, p11.